Appln. No.: 10/591,632

Amendment Dated May 10, 2010

Reply to Office Action of December 8, 2009

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

- (Currently Amended) A method of manufacturing a catalysed ceramic wall-flow filter comprising a plurality of channels, which method comprising the steps of:
 - (a) reducing the pressure in a pore structure of the channel walls relative to the surrounding atmospheric pressure to provide evacuated channel walls, and
 - (b) contacting a surface of the evacuated channel walls with a liquid containing at least one catalyst component or a precursor thereof, wherein the liquid permeates the pore structure of the evacuated channel walls,
 - (c) drying the filter containing the catalyst component or its precursor, and
 - (d) calcining the filter containing the catalyst component or its precursor,

wherein reducing the pressure in the pore structure of the wall-flow filter occurs prior to contacting the surface of the evacuated channel walls with the liquid; and the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter.

- (Currently Amended) A method according to claim ±25, wherein steps (b) and (c) are repeated at least once prior to step (d).
- (Previously Presented) A method according to claim 1, wherein the pressure reduction in the pore structure of the channel walls is maintained during the liquid contacting step.
- (Previously Presented) A method according to claim 1, wherein the liquid contains the
 precursor and comprises an aqueous solution of at least one metal salt.
- (Previously Presented) A method according to claim 1, wherein the liquid containing at least one catalyst component comprises a slurry of at least one particulate metal oxide material in a carrier medium.

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 (Previously Presented) A method according to claim 5, wherein the at least one particulate metal oxide material has a D50 in the range 1-20, μm.

- (Previously Presented) A method according to claim 1, wherein the liquid containing the at least one catalyst component comprises a sol of at least one metal oxide material in a carrier medium.
- (Previously Presented) A method according to claim 7, wherein the sol particles have a D50 in the range 10-500 nm.
- 9. (Canceled)
- (Previously Presented) A method according to claim 1, wherein the at least one catalyst component is loaded in the catalysed ceramic wall-flow filter in an amount from 20-120a/litre.

11. - 14. (Canceled)

- 15. (Previously Presented) A method according to claim 1, wherein the ceramic filter is made from a material selected from the group consisting of silicon, silicon carbide, aluminium nitride, silicon nitride, aluminium titanate, alumina, cordierite, mullite pollucite and a thermet.
- (Previously Presented) A method according to claim 1, wherein the filter has a porosity of 40-60%, prior to use.
- (Canceled)
- 18. (Previously Presented) Apparatus for use in manufacturing a catalysed ceramic wall-flow filter having filter walls, wherein said filter walls define a plurality of channels and have a pore structure, the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter, said apparatus comprising means for sealingly isolating the plurality of channels of the ceramic wall-flow filter from the surrounding atmosphere, means for reducing pressure in the isolated channels to below the surrounding atmospheric pressure thereby to establish a vacuum in the pore structure of the filter walls to provide isolated and evacuated channels, at least one reservoir for

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holding a liquid containing at least one catalyst component or a precursor thereof and means for dosing the isolated and evacuated channels with a pre-determined quantity of the liquid.

- (Cancelled)
- (Cancelled)
- (Previously Presented) An apparatus according to claim 18 wherein the apparatus is at least semi-automated to control both the means for reducing pressure in the isolated channels and the means for dosing the liquid.
- (Previously Presented) A method according to claim 5, wherein the carrier medium comprises water.
- (Previously Presented) A method according to claim 7, wherein the carrier medium comprises water.
- (Previously Presented) A method according to claim 15, wherein the material from
 which the ceramic filter is made is the thermet, wherein the thermet is selected from the
 group consisting of Al₂O₃/Fe, Al₂O₃/Ni and B₄C/Fe.
- 25. (New) A method according to claim 1 further comprising:
 - (c) drying the filter containing the catalyst component or its precursor, and
 - (d) calcining the filter containing the catalyst component or its precursor.
- 26. (New) An apparatus for use in manufacturing a catalysed ceramic wall-flow filter having filter walls, wherein said filter walls define a plurality of channels and have a pore structure, the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter, said apparatus comprising a pressurisable container having a sealable closure for receiving the ceramic wall-flow filter, a vacuum pump to reduce pressure in the isolated channels to below the surrounding atmospheric pressure thereby to establish a vacuum in the pore structure of the filter walls to provide isolated and evacuated channels, at least one reservoir for holding a liquid containing at least

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one catalyst component or a precursor thereof, and a pump for dosing the isolated and evacuated channels with a pre-determined quantity of the liquid.

 (New) An apparatus according to claim 26, wherein the vacuum pump maintains the reduced pressure in the isolated channels to below the surrounding atmospheric pressure during dosing of the liquid.